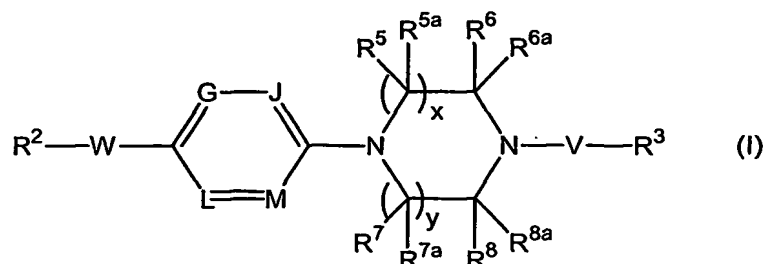


WHAT IS CLAIMED IS

1. A method of inhibiting human stearyl-CoA desaturase (hSCD) activity comprising contacting a source of hSCD with a compound of formula (I):



wherein:

x and y are each independently 1, 2 or 3;

W is -N(R¹)C(O)-, -C(O)N(R¹)-, -OC(O)N(R¹)-, -N(R¹)C(O)N(R¹)-, -O-, -N(R¹)-, -S(O)_t- (where t is 0, 1 or 2), -N(R¹)S(O)₂-, -S(O)₂N(R¹)-, -C(O)-, -OS(O)₂N(R¹)-, -OC(O)-, -C(O)O- or -N(R¹)C(O)O-;

V is -C(O)-, -C(O)O-, -C(S)-, -C(O)N(R¹)-, -S(O)₂-, -S(O)₂N(R¹)- or -C(R¹⁰)H-;

G, J, L and M are each independently selected from -N= or -C(R⁴)=; provided that at least two of G, J, L and M are -N=, and provided that when G and J are both -C(R⁴)=, L and M can not both be -N=, and when L and M are both -C(R⁴)=, G and J can not both be -N=;

each R¹ is independently selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

R² is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl, and C₃-C₁₂heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R³ is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are

independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl;

or R^5 and R^{5a} together, or R^6 and R^{6a} together, or R^7 and R^{7a} together, or R^8 and R^{8a} together are an oxo group, provided that when V is $-C(O)-$, R^6 and R^{6a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

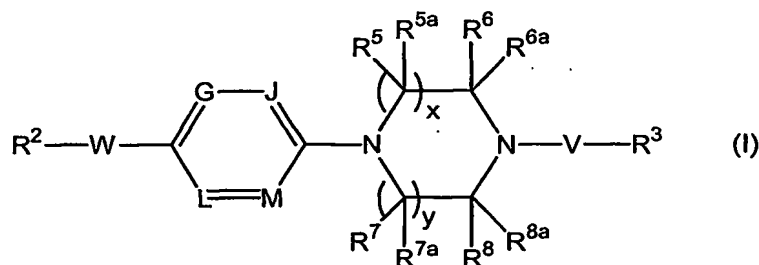
or one of R^5 , R^{5a} , R^6 , and R^{6a} together with one of R^7 , R^{7a} , R^8 and R^{8a} form an alkylene bridge, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 , and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

R^{10} is hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl;

a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

2. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to the mammal in need thereof a therapeutically effective amount of a compound of formula (I):



wherein:

x and y are each independently 1, 2 or 3;

W is $-N(R^1)C(O)-$, $-C(O)N(R^1)-$, $-OC(O)N(R^1)-$, $-N(R^1)C(O)N(R^1)-$, $-O-$, $-N(R^1)-$, $-S(O)_t-$ (where t is 0, 1 or 2), $-N(R^1)S(O)_2-$, $-S(O)_2N(R^1)-$, $-C(O)-$, $-OS(O)_2N(R^1)-$, $-OC(O)-$, $-C(O)O-$ or $-N(R^1)C(O)O-$;

V is -C(O)-, -C(O)O-, -C(S)-, -C(O)N(R¹)-, -S(O)₂-, -S(O)₂N(R¹)- or -C(R¹⁰)H-;

G, J, L and M are each independently selected from -N= or -C(R⁴)=; provided that at least two of G, J, L and M are -N=, and provided that when G and J are both -C(R⁴)=, L and M can not both be -N=, and when L and M are both -C(R⁴)=, G and J can not both be -N=;

each R¹ is independently selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

R² is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl, and C₃-C₁₂heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R³ is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

each R⁴ is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R⁹)₂;

each R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} is independently selected from hydrogen or C₁-C₃alkyl;

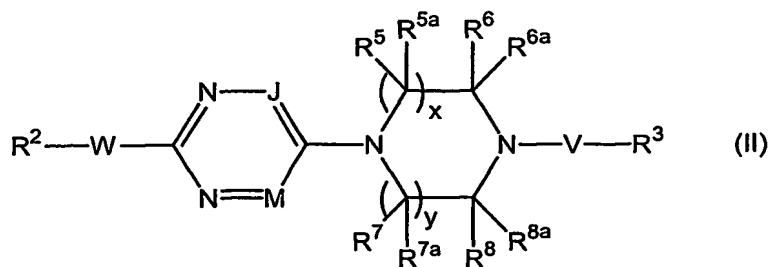
or R⁵ and R^{5a} together, or R⁶ and R^{6a} together, or R⁷ and R^{7a} together, or R⁸ and R^{8a} together are an oxo group, provided that when V is -C(O)-, R⁶ and R^{6a} together or R⁸ and R^{8a} together do not form an oxo group, while the remaining R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} are each independently selected from hydrogen or C₁-C₃alkyl;

or one of R⁵, R^{5a}, R⁶, and R^{6a} together with one of R⁷, R^{7a}, R⁸ and R^{8a} form an alkylene bridge, while the remaining R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸, and R^{8a} are each independently selected from hydrogen or C₁-C₃alkyl;

R¹⁰ is hydrogen or C₁-C₃alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl;
a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

3. The method of Claim 2 wherein the mammal is a human.
4. The method of Claim 3 wherein the disease or condition is selected from the group consisting of fatty liver, non-alcoholic steatohepatitis, Type II diabetes, impaired glucose tolerance, insulin resistance, obesity, dyslipidemia and metabolic syndrome and any combination of these.
5. The method of Claim 4 wherein the disease or condition is Type II diabetes.
6. The method of Claim 4 wherein the disease or condition is obesity.
7. The method of Claim 4 wherein the disease or condition is metabolic syndrome.
8. The method of Claim 4 wherein the disease or condition is fatty liver.
9. The method of Claim 4 wherein the disease or condition is non-alcoholic steatohepatitis.
10. A compound of formula (II):



wherein:

x and y are each independently 1, 2 or 3;

W is $-N(R^1)C(O)-$, $-C(O)N(R^1)-$, $-OC(O)N(R^1)-$, $-N(R^1)C(O)N(R^1)-$, $-O-$,

-N(R¹)-, -S(O)_t- (where t is 0, 1 or 2), -N(R¹)S(O)₂-, -S(O)₂N(R¹)-, -C(O)-, -OS(O)₂N(R¹)-, -OC(O)-, -C(O)O- or -N(R¹)C(O)O-;

V is -C(O)-, -C(O)O-, -C(S)-, -C(O)N(R¹)-, -S(O)₂-, -S(O)₂N(R¹)- or -C(R¹⁰)H-;

J and M are each independently selected from -N= or -C(R⁴)=;

each R¹ is independently selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

R² is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl, and C₃-C₁₂heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R³ is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₂-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, aryl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R³ is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

each R⁴ is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R⁹)₂;

each R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} is independently selected from hydrogen or C₁-C₃alkyl;

or R⁵ and R^{5a} together, or R⁶ and R^{6a} together, or R⁷ and R^{7a} together, or R⁸ and R^{8a} together are an oxo group, provided that when V is -C(O)-, R⁶ and R^{6a} together or R⁸ and R^{8a} together do not form an oxo group, while the remaining R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} are each independently selected from hydrogen or C₁-C₃alkyl;

or one of R⁵, R^{5a}, R⁶, and R^{6a} together with one of R⁷, R^{7a}, R⁸ and R^{8a} form an alkylene bridge, while the remaining R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸, and R^{8a} are each independently selected from hydrogen or C₁-C₃alkyl;

R¹⁰ is hydrogen or C₁-C₃alkyl; and

each R⁹ is independently selected from hydrogen or C₁-C₆alkyl;

a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

11. The compound of Claim 10 wherein:

x and y are each independently 1, 2 or 3;

W is $-N(R^1)C(O)-$, $-C(O)N(R^1)-$, $-OC(O)N(R^1)-$, $-N(R^1)C(O)N(R^1)-$, $-O-$, $-N(R^1)-$, $-S(O)_t-$ (where t is 0, 1 or 2), $-N(R^1)S(O)_2-$, $-S(O)_2N(R^1)-$, $-C(O)-$, $-OS(O)_2N(R^1)-$, $-OC(O)-$, $-C(O)O-$ or $-N(R^1)C(O)O-$;

V is $-C(O)-$, $-C(O)O-$, $-C(S)-$, $-C(O)N(R^1)-$, $-S(O)_2-$, $-S(O)_2N(R^1)-$ or $-C(R^{10})H-$;

J and M are each $-C(R^4)=$;

each R^1 is independently selected from the group consisting of hydrogen, C_1 - C_{12} alkyl, C_2 - C_{12} hydroxyalkyl, C_4 - C_{12} cycloalkylalkyl and C_7 - C_{19} aralkyl;

R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl, and C_3 - C_{12} heteroarylalkyl;

R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl;

or R^5 and R^{5a} together, or R^6 and R^{6a} together, or R^7 and R^{7a} together, or R^8 and R^{8a} together are an oxo group, provided that when V is $-C(O)-$, R^6 and R^{6a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^5 , R^{5a} , R^6 , and R^{6a} together with one of R^7 , R^{7a} , R^8 and R^{8a} form an alkylene bridge, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 , and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.

12. The compound of Claim 11 wherein:
x and y are each independently 1, 2 or 3;
W is $-N(R^1)C(O)-$;
V is $-C(O)-$;
J and M are each $-C(R^4)=$;
 R^1 is selected from the group consisting of hydrogen or C_1-C_{12} alkyl;
each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;
each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1-C_3 alkyl; and
each R^9 is independently selected from hydrogen or C_1-C_6 alkyl.
13. The compound of Claim 12 wherein:
x and y are each 1;
each R^4 is hydrogen; and
 R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} are each hydrogen.
14. The compound of Claim 13 wherein:
 R^3 is aryl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1-C_6 alkyl, C_1-C_6 trihaloalkyl, C_1-C_6 trihaloalkoxy, C_1-C_6 alkylsulfonyl, $-N(R^{12})_2$, $-OC(O)R^{12}$, $-C(O)OR^{12}$, $-S(O)_2N(R^{12})_2$, cycloalkyl, heterocyclyl, heteroaryl and heteroaryl(cycloalkyl); and
each R^{12} is independently selected from hydrogen, C_1-C_6 alkyl, C_3-C_6 cycloalkyl, aryl or aralkyl.
15. The compound of Claim 14 wherein:
 R^2 is C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_2-C_{12} hydroxyalkyl, C_2-C_{12} hydroxyalkenyl, C_3-C_{12} cycloalkyl, C_4-C_{12} cycloalkylalkyl, C_7-C_{19} aralkyl, C_3-C_{12} heterocyclalkyl or C_3-C_{12} heteroarylalkyl; and
 R^3 is phenyl optionally substituted by one or more substituents selected from halo, C_1-C_6 alkyl, C_1-C_6 trihaloalkyl and C_1-C_6 trihaloalkoxy.
16. The compound of Claim 15 wherein R^2 is C_7-C_{12} aralkyl optionally substituted by one or more substituents selected from halo or C_1-C_6 trihaloalkyl.

17. The compound of Claim 16 selected from the group consisting of the following:
 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyrimidine-2-carboxylic acid phenethyl-amide;
 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyrimidine-2-carboxylic acid (3-phenyl-propyl)-amide; and
 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyrimidine-2-carboxylic acid benzylamide.
18. The compound of Claim 15 wherein R^2 is C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl or C_2 - C_{12} hydroxyalkenyl.
19. The compound of Claim 18, namely, 5-[4-(2-Trifluoromethyl-benzoyl)-piperazin-1-yl]-pyrimidine-2-carboxylic acid hexylamide.
20. The compound of Claim 11 wherein:
 x and y are each independently 1, 2 or 3;
 W is $-C(O)N(R^1)-$;
 V is $-C(O)-$;
 J and M are each $-C(R^4)=$;
 R^1 is selected from the group consisting of hydrogen or C_1 - C_{12} alkyl;
 each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;
 each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl; and
 each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.
21. The compound of Claim 11 wherein:
 x and y are each independently 1, 2 or 3;
 W is $-N(R^1)C(O)N(R^1)-$;
 V is $-C(O)-$;
 J and M are each $-C(R^4)=$;
 R^1 is selected from the group consisting of hydrogen or C_1 - C_{12} alkyl;
 each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.

22. The compound of Claim 11 wherein:

x and y are each independently 1, 2 or 3;

W is $-O-$, $-N(R^1)-$ or $-S(O)_t-$ (where t is 0, 1 or 2);

V is $-C(O)-$;

J and M are each $-C(R^4)=$;

R^1 is selected from the group consisting of hydrogen or C_1 - C_{12} alkyl;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.

23. The compound of Claim 11 wherein:

x and y are each independently 1, 2 or 3;

W is $-N(R^1)S(O)_2-$ or $-S(O)_2N(R^1)-$;

V is $-C(O)-$;

J and M are each $-C(R^4)=$;

R^1 is selected from the group consisting of hydrogen or C_1 - C_{12} alkyl;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.

24. The compound of Claim 11 wherein:

x and y are each independently 1, 2 or 3;

W is $-C(O)-$;

V is $-C(O)-$;

J and M are each $-C(R^4)=$;

R^1 is selected from the group consisting of hydrogen or C_1 - C_{12} alkyl;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl,

methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.

25. The compound of Claim 11 wherein:

x and y are each independently 1, 2 or 3;

W is $-C(O)O-$ or $-N(R^1)C(O)O-$;

V is $-C(O)-$;

J and M are each $-C(R^4)=$;

R^1 is selected from the group consisting of hydrogen or C_1 - C_{12} alkyl;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl.

26. The compound of any one of Claim 20, Claim 21, Claim 22, Claim 23, Claim 24 and Claim 25 wherein:

x and y are each 1;

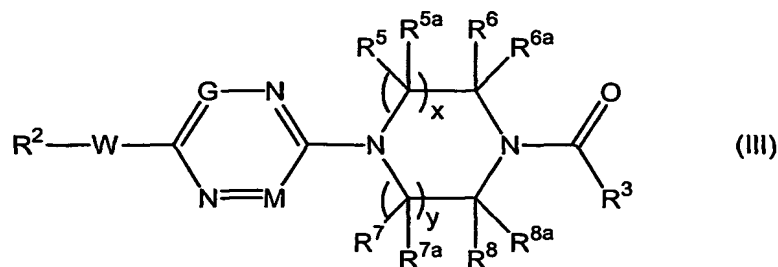
each R^4 is hydrogen; and

R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} are each hydrogen.

27. A method of treating a disease or condition mediated by stearyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 10.

28. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 10.

29. A compound of formula (III):



wherein:

x and y are each independently 1, 2 or 3;

W is -N(R¹)C(O)-, -C(O)N(R¹)- or -OC(O)N(R¹)-;

G and M are each -C(R⁴)=;

each R¹ is independently selected from the group consisting of hydrogen, C₁-C₁₂alkyl, C₂-C₁₂hydroxyalkyl, C₄-C₁₂cycloalkylalkyl and C₇-C₁₉aralkyl;

R² is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₃-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, C₇-C₁₉aralkyl, C₃-C₁₂heterocyclyl, C₃-C₁₂heterocyclalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

or R² is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R³ is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C₁-C₆alkyl, C₁-C₆trihaloalkyl, C₁-C₆trihaloalkoxy, C₁-C₆alkylsulfonyl, -N(R¹²)₂, -OC(O)R¹², -C(O)OR¹², -S(O)₂N(R¹²)₂, cycloalkyl, heterocyclyl, heteroaryl and heteroarylalkyl, provided that R³ is not phenyl substituted with optionally substituted thienyl;

each R⁴ is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or -N(R⁹)₂;

each R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} is independently selected from hydrogen or C₁-C₃alkyl;

or R⁵ and R^{5a} together or R⁷ and R^{7a} together form an oxo group, while the remaining R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} are each independently selected from hydrogen or C₁-C₃alkyl;

or one of R⁵, R^{5a}, R⁶, and R^{6a} together with one of R⁷, R^{7a}, R⁸ and R^{8a} form an alkylene bridge, while the remaining R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸, and R^{8a} are

each independently selected from hydrogen or C₁-C₃alkyl;

each R⁹ is independently selected from hydrogen or C₁-C₆alkyl; and

each R¹² is independently selected from hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl;

a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

30. The compound of Claim 29 wherein W is -N(R¹)C(O)-.

31. The compound of Claim 30 wherein:

x and y are each 1;

R¹ is hydrogen or C₁-C₆alkyl;

R² is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₃-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, C₇-C₁₉aralkyl, C₃-C₁₂ heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

R³ is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C₁-C₆alkyl, C₁-C₆trihaloalkyl, C₁-C₆trihaloalkoxy, C₁-C₆alkylsulfonyl, -N(R¹²)₂, -OC(O)R¹², -C(O)OR¹², -S(O)₂N(R¹²)₂, cycloalkyl, heterocyclyl, heteroaryl and heteroaryl(cycloalkyl, provided that R³ is not phenyl substituted with optionally substituted thienyl;

each R⁴ is hydrogen;

each R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} is hydrogen; and

each R¹² is independently selected from hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl.

32. The compound of Claim 31 wherein:

R² is independently selected from C₂-C₁₂alkenyl or C₁-C₁₂alkyl optionally substituted by -OR¹²;

R³ is phenyl optionally substituted by one or more substituents selected from the group consisting of halo C₁-C₆alkyl, C₁-C₆trihaloalkyl and C₁-C₆trihaloalkoxy; and

R¹² is hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl.

33. The compound of Claim 32 selected from the group consisting of the

following:

- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid (3-methyl-butyl)-amide;
- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid (2-phenoxy-ethyl)-amide; and
- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid pentylamide.

34. The compound of Claim 31 wherein:

- R^2 is C_7 - C_{12} alkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl and C_1 - C_6 trihaloalkyl; and
- R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

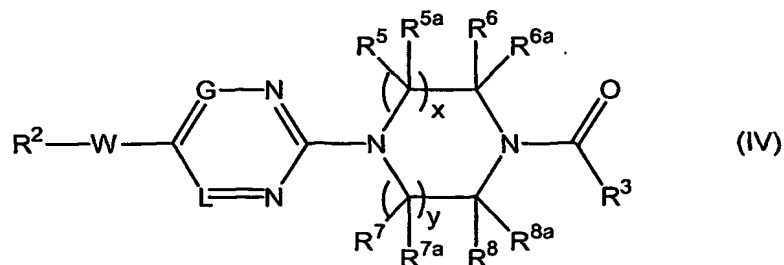
35. The compound of claim 34 selected from the group consisting of the following:

- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid phenethyl-amide;
- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid (3-phenyl-propyl)-amide;
- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid [2-(4-fluoro-phenyl)-ethyl]-amide;
- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid [3-(4-fluoro-phenyl)-propyl]-amide; and
- 4-(2-Trifluoromethyl-benzoyl)-3,4,5,6-tetrahydro-2H-[1,2']bipyrazinyl-5'-carboxylic acid [3-(4-fluoro-phenyl)-propyl]-amide.

36. A method of treating a disease or condition mediated by stearoyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 29.

37. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 29.

38. A compound of formula (IV):



wherein:

x and y are each independently 1, 2 or 3;

W is $-N(R^1)C(O)-$, $-C(O)N(R^1)-$ or $-OC(O)N(R^1)-$;

G and L are each $-C(R^4)=$;

each R^1 is independently selected from the group consisting of hydrogen, C_1 - C_{12} alkyl, C_2 - C_{12} hydroxyalkyl, C_4 - C_{12} cycloalkylalkyl and C_7 - C_{19} aralkyl;

R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_3 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R^2 is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl, C_1 - C_6 trihaloalkoxy, C_1 - C_6 alkylsulfonyl, $-N(R^{12})_2$, $-OC(O)R^{12}$, $-C(O)OR^{12}$, $-S(O)_2N(R^{12})_2$, cycloalkyl, heterocyclyl, heteroaryl and heteroarylalkyl, provided that R^3 is not phenyl substituted with optionally substituted thienyl;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl;

or R^5 and R^{5a} together or R^7 and R^{7a} together form an oxo group, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^5 , R^{5a} , R^6 , and R^{6a} together with one of R^7 , R^{7a} , R^8 and R^{8a} form an alkylene bridge, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 , and R^{8a} are

each independently selected from hydrogen or C₁-C₃alkyl;

each R⁹ is independently selected from hydrogen or C₁-C₆alkyl; and

each R¹² is independently selected from hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl;

a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

39. The compound of Claim 38 wherein W is -N(R¹)C(O)-.

40. The compound of Claim 39 wherein:

x and y are each 1;

R¹ is hydrogen or C₁-C₆alkyl;

R² is selected from the group consisting of C₁-C₁₂alkyl, C₂-C₁₂alkenyl, C₂-C₁₂hydroxyalkyl, C₂-C₁₂hydroxyalkenyl, C₃-C₁₂alkoxyalkyl, C₃-C₁₂cycloalkyl, C₄-C₁₂cycloalkylalkyl, C₇-C₁₉aralkyl, C₃-C₁₂ heterocyclyl, C₃-C₁₂heterocyclylalkyl, C₁-C₁₂heteroaryl and C₃-C₁₂heteroarylalkyl;

R³ is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C₁-C₆alkyl, C₁-C₆trihaloalkyl, C₁-C₆trihaloalkoxy, C₁-C₆alkylsulfonyl, -N(R¹²)₂, -OC(O)R¹², -C(O)OR¹², -S(O)₂N(R¹²)₂, cycloalkyl, heterocyclyl, heteroaryl and heteroaryl/cycloalkyl, provided that R³ is not phenyl substituted with optionally substituted thienyl;

each R⁴ is independently selected from hydrogen, fluoro, chloro, methyl, methoxy or trifluoromethyl;

each R⁵, R^{5a}, R⁶, R^{6a}, R⁷, R^{7a}, R⁸ and R^{8a} is hydrogen; and

each R¹² is independently selected from hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl.

41. The compound of Claim 40 wherein:

R² is independently selected from C₂-C₁₂alkenyl or C₁-C₁₂alkyl;

R³ is phenyl optionally substituted by one or more substituents selected from the group consisting of halo C₁-C₆alkyl, C₁-C₆trihaloalkyl and C₁-C₆trihaloalkoxy; and

R¹² is hydrogen, C₁-C₆alkyl, C₃-C₆cycloalkyl, aryl or aralkyl.

42. The compound of Claim 41 selected from the group consisting of the

following:

4-trifluoromethyl-2-[4-(2-trifluoromethylbenzoyl)piperazin-1-yl]-pyrimidine-5-carboxylic acid (3-methylbutyl)amide; and

2-[4-(2-Trifluoromethylbenzoyl)piperazin-1-yl]pyrimidine-5-carboxylic acid (3-methylbutyl)amide.

43. The compound of Claim 40 wherein:

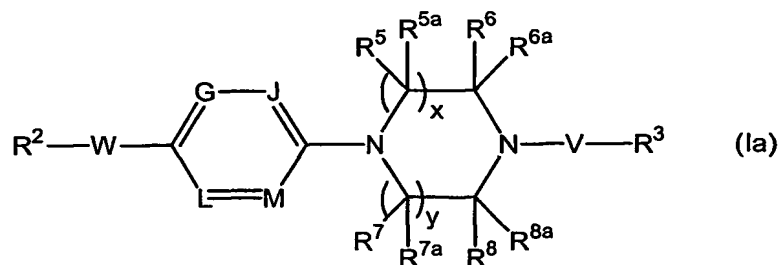
R^2 is C_7 - C_{12} alkyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl and C_1 - C_6 trihaloalkyl; and

R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 trihaloalkyl and C_1 - C_6 trihaloalkoxy.

44. A method of treating a disease or condition mediated by stearyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 38.

45. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 38.

46. A compound of formula (Ia):



wherein:

x and y are each independently 1, 2 or 3;

W is $-N(R^1)C(O)N(R^1)-$, $-O-$, $-N(R^1)-$, $-S(O)_t-$ (where t is 0, 1 or 2), $-N(R^1)S(O)_2-$, $-S(O)_2N(R^1)-$, $-C(O)O-$ or $-N(R^1)C(O)O-$;

V is $-C(O)-$, $-C(O)O-$, $-C(S)-$, $-C(O)N(R^1)-$, $-S(O)_2-$ or $-S(O)_2N(R^1)-$;

G, J, L and M are each independently selected from $-N=$ or $-C(R^4)=$;

provided that at least two of G, J, L and M are $-N=$, and provided that when G and J

are both $-C(R^4)=$, L and M can not both be $-N=$, and when L and M are both $-C(R^4)=$, G and J can not both be $-N=$;

each R^1 is independently selected from the group consisting of hydrogen, C_1 - C_{12} alkyl, C_2 - C_{12} hydroxyalkyl, C_4 - C_{12} cycloalkylalkyl and C_7 - C_{19} aralkyl;

R^2 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl, and C_3 - C_{12} heteroarylalkyl;

or R^2 is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

R^3 is selected from the group consisting of C_1 - C_{12} alkyl, C_2 - C_{12} alkenyl, C_2 - C_{12} hydroxyalkyl, C_2 - C_{12} hydroxyalkenyl, C_2 - C_{12} alkoxyalkyl, C_3 - C_{12} cycloalkyl, C_4 - C_{12} cycloalkylalkyl, aryl, C_7 - C_{19} aralkyl, C_3 - C_{12} heterocyclyl, C_3 - C_{12} heterocyclylalkyl, C_1 - C_{12} heteroaryl and C_3 - C_{12} heteroarylalkyl;

or R^3 is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl and where some or all of the rings may be fused to each other;

each R^4 is independently selected from hydrogen, fluoro, chloro, methyl, methoxy, trifluoromethyl, cyano, nitro or $-N(R^9)_2$;

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is independently selected from hydrogen or C_1 - C_3 alkyl;

or R^5 and R^{5a} together, or R^6 and R^{6a} together, or R^7 and R^{7a} together, or R^8 and R^{8a} together are an oxo group, provided that when V is $-C(O)-$, R^6 and R^{6a} together or R^8 and R^{8a} together do not form an oxo group, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl;

or one of R^5 , R^{5a} , R^6 , and R^{6a} together with one of R^7 , R^{7a} , R^8 and R^{8a} form an alkylene bridge, while the remaining R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 , and R^{8a} are each independently selected from hydrogen or C_1 - C_3 alkyl; and

each R^9 is independently selected from hydrogen or C_1 - C_6 alkyl;

a stereoisomer, enantiomer or tautomer thereof, a pharmaceutically acceptable salt thereof, a pharmaceutical composition thereof or a prodrug thereof.

47. The compound of Claim 46 wherein W is $-N(R^1)C(O)N(R^1)-$ and V is $-C(O)-$.

48. The compound of Claim 47 wherein:

x and y are each 1;

each R^1 is independently selected from the group consisting of hydrogen or C_1-C_6 alkyl;

R^2 is selected from the group consisting of C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_2-C_{12} hydroxyalkyl, C_2-C_{12} hydroxyalkenyl, C_2-C_{12} alkoxyalkyl, C_3-C_{12} cycloalkyl, C_4-C_{12} cycloalkylalkyl, aryl, C_7-C_{19} aralkyl, C_3-C_{12} heterocyclyl, C_3-C_{12} heterocyclylalkyl, C_1-C_{12} heteroaryl, and C_3-C_{12} heteroarylalkyl;

R^3 is selected from the group consisting of C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_2-C_{12} hydroxyalkyl, C_2-C_{12} hydroxyalkenyl, C_2-C_{12} alkoxyalkyl, C_3-C_{12} cycloalkyl, C_4-C_{12} cycloalkylalkyl, aryl, C_7-C_{19} aralkyl, C_3-C_{12} heterocyclyl, C_3-C_{12} heterocyclylalkyl, C_1-C_{12} heteroaryl and C_3-C_{12} heteroarylalkyl;

each R^4 is hydrogen; and

each R^5 , R^{5a} , R^6 , R^{6a} , R^7 , R^{7a} , R^8 and R^{8a} is hydrogen.

49. The compound of Claim 48 wherein:

R^2 is selected from the group consisting of C_1-C_{12} alkyl, C_2-C_{12} alkenyl, C_4-C_{12} cycloalkylalkyl, C_7-C_{19} aralkyl, C_3-C_{12} heterocyclylalkyl and C_3-C_{12} heteroarylalkyl;

R^3 is phenyl optionally substituted by one or more substituents selected from the group consisting of halo, cyano, nitro, hydroxy, C_1-C_6 alkyl, C_1-C_6 trihaloalkyl, C_1-C_6 trihaloalkoxy, C_1-C_6 alkylsulfonyl, $-N(R^{12})_2$, $-OC(O)R^{12}$, $-C(O)OR^{12}$, $-S(O)_2N(R^{12})_2$, cycloalkyl, heterocyclyl, heteroaryl and heteroarylcycloalkyl; and

each R^{12} is independently selected from hydrogen, C_1-C_6 alkyl, C_3-C_6 cycloalkyl, aryl or aralkyl.

50. A method of treating a disease or condition mediated by stearyl-CoA desaturase (SCD) in a mammal, wherein the method comprises administering to a mammal in need thereof a therapeutically effective amount of a compound of Claim 46.

51. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a therapeutically effective amount of a compound of Claim 46